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adjusting in real time at least one of the manufacturing process and the treatment process for the paper web based on input from the human operator, wherein the input from the operator is based on defects determined from the images.

23. A method for monitoring and controlling quality of a paper web as the paper web is being manufactured, comprising:

conveying the paper web through a paper machine where the paper web is formed as part of a manufacturing process and thereafter treating the paper web by subjecting the paper web to a treatment process;

imaging the paper web with a thermal camera in real time as the paper web is manufactured;

displaying the images to a human operator in real time;

analyzing images from the thermal camera in real time as the images are captured by the thermal camera to detect defects in the paper web based on the images; and

adjusting in real time at least one of the manufacturing process and the treatment process for the paper web based on input from the human operator, wherein the input from the operator is based on defects determined from the images.

24. A method for monitoring and controlling quality of a paper web as the paper web is being manufactured, comprising:

conveying the paper web through a paper machine where the paper web is formed as part of a manufacturing process and thereafter treating the paper web by subjecting the paper web to a treatment process;

imaging the paper web with a thermal camera as the paper web is manufactured; displaying the images to a human operator;

analyzing images from the thermal camera as the images are captured by the thermal camera;

detecting defects in the paper web directly from the images as they are captured such that there is not a requirement to store the images for later analysis; and